## Message

From: Cohen, Janet [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=D94B854E69CD4F9E80DB946BF9D1C1B2-COHEN, JANET]

**Sent**: 11/5/2015 1:59:19 PM

To: Wehrly, Linc [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=64e5f31ccb4841018441b3bf074842d0-Wehrly, Linc]

Subject: FW: Using Bulk Remote Sensing Data to expose abnormal real-world emissions

Attachments: 20151103\_DRAFT\_Diesel\_Onroad\_Vehicles\_RS\_Excess\_Emissions\_VW.pdf; ATT00001.htm;

20151103\_DRAFT\_Diesel\_Onroad\_Vehicles\_RS\_Excess\_Emissions\_BMW\_Chev\_Merz.pdf; ATT00002.htm

This is interesting data. Please share with your team as you like - j. -

From: Nam, Ed

**Sent:** Wednesday, November 04, 2015 9:49 PM **To:** Cohen, Janet <cohen.janet@epa.gov>

Subject: Fwd: Using Bulk Remote Sensing Data to expose abnormal real-world emissions

Janet

I have not looked at these yet.

Ed

Sent from my iPhone

Begin forwarded message:

**From:** "McClintock, Peter" < <u>Peter.McClintock@SystechPortal.onmicrosoft.com</u> >

**Date:** November 4, 2015 at 3:41:30 PM PST **To:** "nam.ed@epa.gov" <nam.ed@epa.gov>

Cc: "Vescio, Niranjan" < Niranjan. Vescio@OpusInspection.com>

Subject: Using Bulk Remote Sensing Data to expose abnormal real-world emissions

Ed,

Thanks so much for your time with Niranjan and myself last week. We see the VW saga has extended to newer 3-liter models and thought you would be interested to see the RSD results for those models. The two files attached contain examples of:

- VW diesel models by model year;
- Some BMW, Chev, and Mercedes diesel models by model year.

These examples are drawn from a deeper set of remote sensing data extending from 2011-august 2015. MPG is Combined City/Highway from <u>fueleconomy.gov</u>. I believe the standards for all these models are Tier2Bin5 – anyway that is what is assumed.

These tables illustrate remote sensing's ability to monitor all active makes, models and model years simultaneously and to highlight those that merit further investigation. You will note higher NO emissions for virtually all 3-liter VW models extending back to their introduction, including for Q7 which we did not see included in EPA or CARB NOV list of models. By contrast, most of the BMW, Chev and Mercedes diesel models appear to have on-road emissions within the in-use standards or sufficiently

close that might be accounted for by the higher average VSP on-road than in the cert driving cycles. No humidity correction factors have been applied.

Another popular category of diesel models with low exhaust are 6 to 7 liter heavy, light-duty trucks (mostly pick-ups), medium-duty trucks and MPVs. For some models the data are sparse - so it would be useful to acquire more.

We would welcome the opportunity to have another call to walk through some of the findings and discuss what additional steps would be useful. Could you let us know some times that work for you?

Best regards

Peter